

AMENDMENTS TO THE CLAIMS

1-9. (Cancelled)

10. (Currently Amended) An epitaxial growth method comprising: supporting a substrate for growth with a substrate supporter, forming a III-V compound semiconductor layer comprising 3 or 4 elements on the substrate for growth by metal organic chemical vapor deposition, polishing the substrate so that an angle of gradient is not in the range from above 0.03° to below 0.04° 0.00° to 0.03° or 0.04° to 0.10° with respect to (100) direction in an entire effective area of the substrate, and forming the compound semiconductor layer to be 0.5 μ m thick or more on the substrate by using the substrate for growth,

wherein the 3 or 4 elements are selected from the group consisting of AlGaAs, AlInAs, AlInGaAs and combinations thereof, and

wherein the dislocation density of the substrate is 5000 cm⁻² or less.

11. (Previously Presented) The epitaxial growth method as claimed in claim 10, further comprising: forming a buffer layer on the substrate for growth, and forming the compound semiconductor layer on the buffer layer.

12. (Cancelled)

13. (Cancelled)

14. (Currently Amended) The epitaxial growth method as claimed in claim 10 ~~12~~,
wherein the compound semiconductor layer comprises AlInAs ~~is an InGaAs layer or an InAlAs~~
~~layer.~~

15. (Currently Amended) The epitaxial growth method as claimed in claim 11 ~~13~~,
wherein the compound semiconductor layer comprises AlInAs ~~is an InGaAs layer or an InAlAs~~
~~layer.~~

16. (Currently Amended) The epitaxial growth method as claimed in claim 10 ~~12~~,
wherein the substrate for growth is a semiconductor crystal substrate having a dislocation density
of 5000cm^{-2} or less.

17. (Currently Amended) The epitaxial growth method as claimed in claim 11 ~~13~~,
wherein the substrate for growth is a semiconductor crystal substrate having a dislocation density
of 5000cm^{-2} or less.

18. (Previously Presented) The epitaxial growth method as claimed in claim 14,
wherein the substrate for growth is a semiconductor crystal substrate having dislocation density
of 5000cm^{-2} or less.

19. (Previously Presented) The epitaxial growth method as claimed in claim 15, wherein the substrate for growth is a semiconductor crystal substrate having dislocation density of 5000cm^{-2} or less.

20. (Previously Presented) The epitaxial growth method as claimed in claim 16, wherein the substrate for growth is an InP substrate.

21. (Previously Presented) The epitaxial growth method as claimed in claim 17, wherein the substrate for growth is an InP substrate.

22. (Previously Presented) The epitaxial growth method as claimed in claim 18, wherein the substrate for growth is an InP substrate.

23. (Previously Presented) The epitaxial growth method as claimed in claim 19, wherein the substrate for growth is an InP substrate.

24. (Currently Amended) A substrate for epitaxial growth used for an epitaxial growth method in which a compound semiconductor layer comprising 3 or 4 elements is formed on the substrate for growth by metal organic chemical vapor deposition, wherein an angle of gradient is not in the range from above 0.03° to below 0.04° 0.00° to 0.03° or 0.04° to 0.10° with respect to (100) direction in an entire effective area of the substrate.

25. (Previously Presented) The substrate for epitaxial growth as claimed in claim 24, wherein the substrate is a semiconductor crystal substrate having dislocation density of 5000cm^{-2} or less.

26. (Previously Presented) The substrate for epitaxial growth as claimed in claim 24, wherein the substrate is an InP substrate.

27. (Previously Presented) The substrate for epitaxial growth as claimed in claim 25, wherein the substrate is an InP substrate.